REL-FO/L-24DC/1X21 - Single relay

1308188

https://www.phoenixcontact.com/us/products/1308188

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Plug-in miniature relay, FASTON connection, 1 changeover contact, status display: LED (yellow), Input voltage: 24 V DC

Commercial data

Item number	1308188
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DKF931
GTIN	4063151557072
Weight per piece (including packing)	25.43 g
Weight per piece (excluding packing)	25.43 g
Customs tariff number	85364190
Country of origin	CN

Technical data

Notes

Notes on operation	Do not use to separate SELV/PELV circuits from other circuits, because safe isolation is not guaranteed. (applies to the optocoupler variants)
Notes on operation	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.

Product properties

Product type	Single relay
Product family	ESSENTIAL edition
Operating mode	100% operating factor
Mechanical service life	approx. 5x 10^7 cycles
Relay type	Electromechanical relay

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	3

Data management status

Date of last data management	03.07.2025

Electrical properties

Maximum power dissipation for nominal condition	0.58 W
Test voltage (Winding/contact)	5 kV_{rms} (50 Hz, 1 min., winding/contact)
Test voltage (open contact)	1 kV_{rms} (50 Hz, 1 min., open contact)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	16.8 V DC ... 26.4 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	24 mA
Input power dissipation for U_N	0.58 W
Typical response time	2 ms ... 10 ms
Typical release time range	5 ms ... 20 ms
Status display	LED (yellow)
Coil resistance	1080 Ω ±10 %

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC
	30 V DC
Minimum switching voltage	5 V (100 mA)
Limiting continuous current	12 A
Maximum inrush current	24 A (20 ms, N/O contacts)
Inrush current, minimum	100 mA (5 V)
Interrupting rating (ohmic load) max.	288 W (24 V DC)
	360 W (30 V DC)
	3000 VA (250 V AC)

Connection data

Connection method	FASTON connection

Dimensions

Width	13 mm
Height	31.1 mm
Depth	30 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay)	RT II (Relay)
Degree of protection (Installation location)	IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 2000 m

Standards and regulations

Standards/regulations	IEC 61810-1
	IEC 60664-1

Air clearances and creepage distances between the power circuits

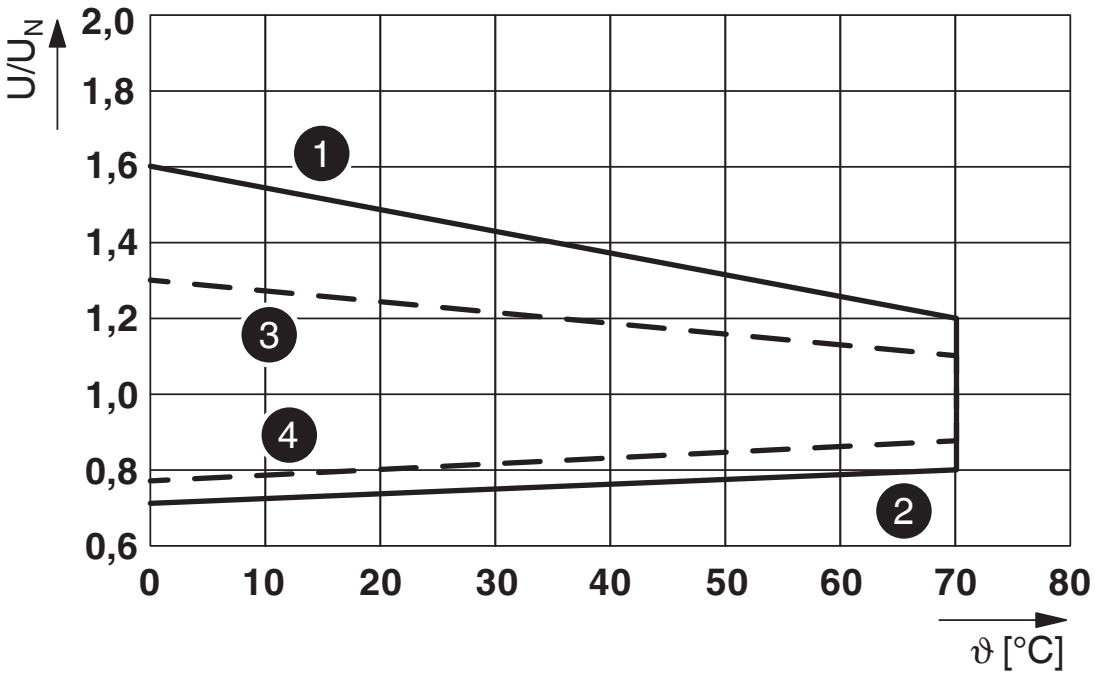
Standards/regulations	IEC 60664-1

Mounting

Mounting position	any

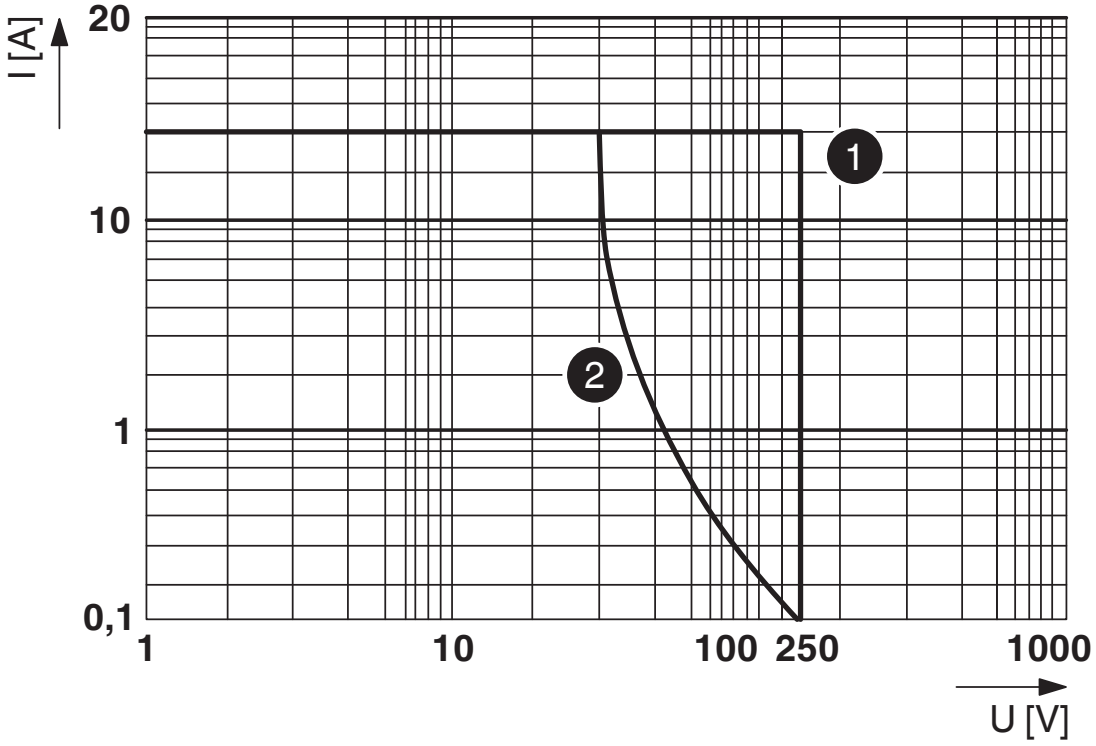
Drawings

Diagram



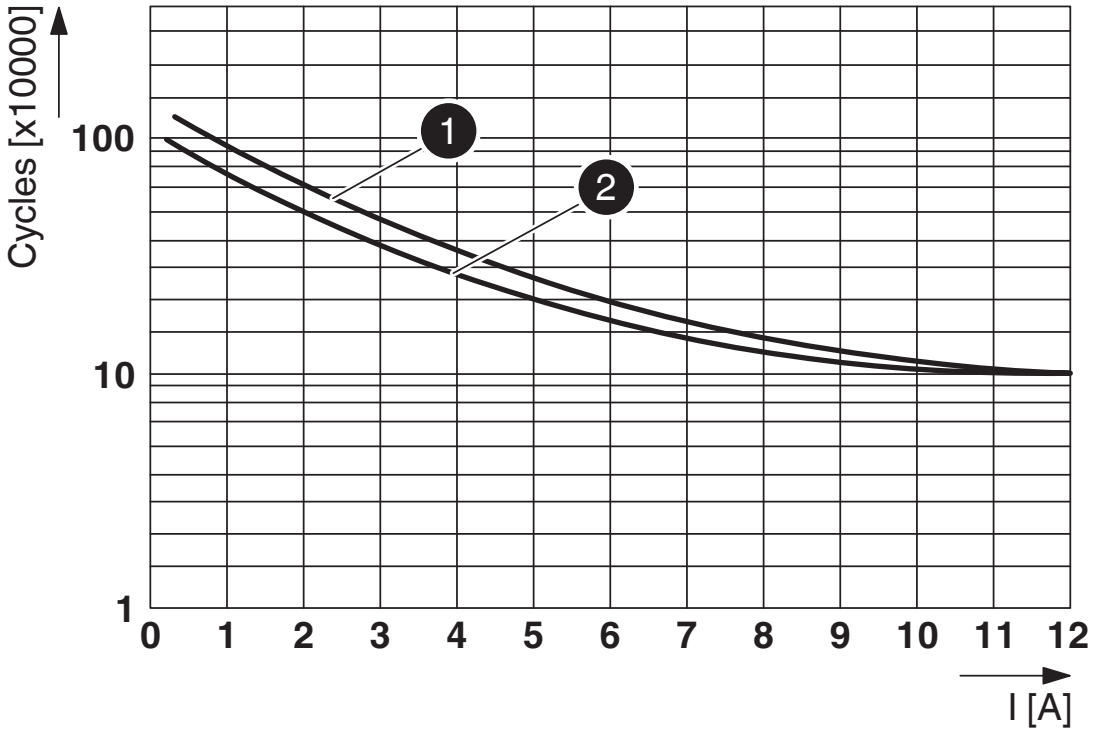
1) DC coil: maximum continuous voltage at limiting continuous current
2) DC coil: minimum operate voltage for pre-excitation with UN and limiting continuous current
3) AC coil: maximum continuous voltage at limiting continuous current
4) AC coil: minimum operate voltage for pre-excitation with UN and limiting continuous current

Diagram



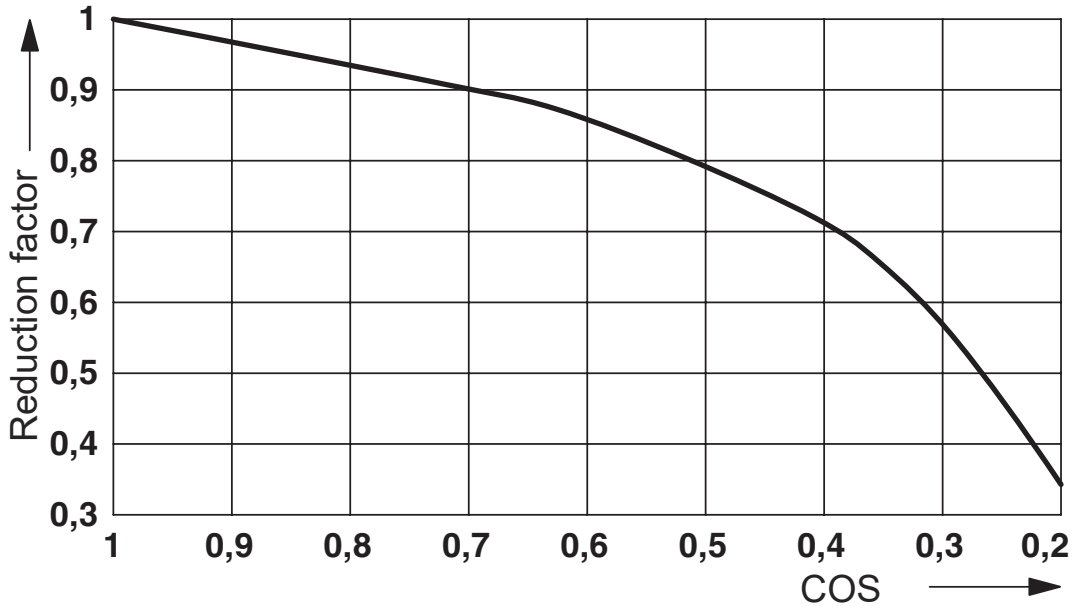
Interrupting rating
1) AC, ohmic load
2) DC, ohmic load

Diagram



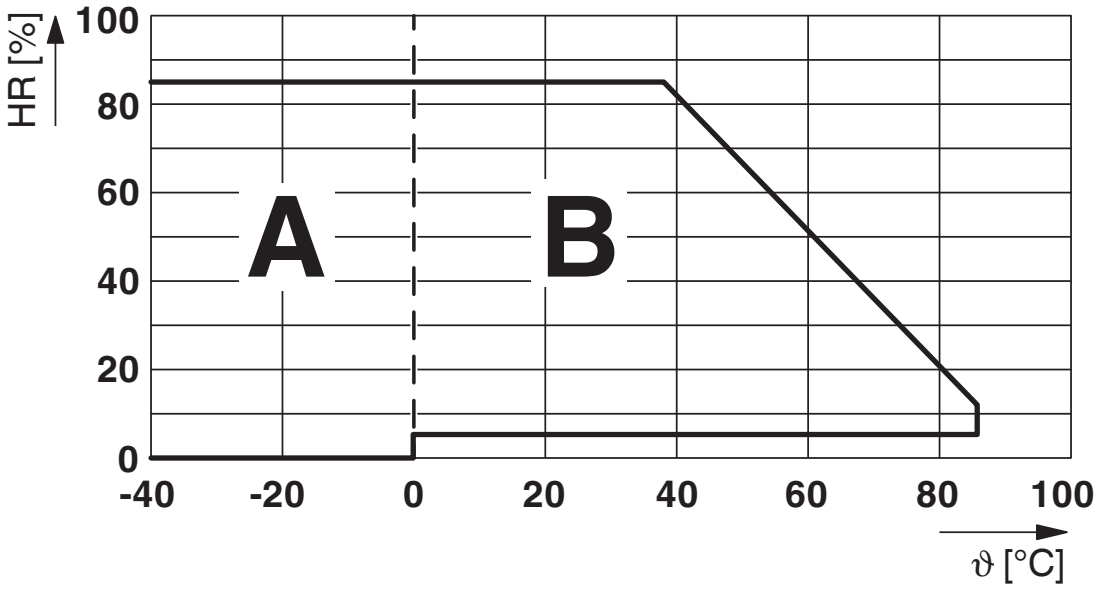
Electrical service life
1) 30 V DC resistance load
2) 250 V AC resistance load

Diagram



Service life reduction factor with various cos phi

Diagram



Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1308188

cUL Recognized
Approval ID: FILE E 172140

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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 9.0	EC001437

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Mandatory accessories

ECOR-1-BSC2/FO/1X21 - Relay base

1308331

https://www.phoenixcontact.com/us/products/1308331



ECOR-1 relay base, for FASTON relay, Fork-type cable lug, 1 changeover contact, Input voltage 230 V AC

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